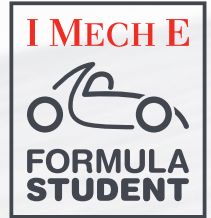


FORMULA STUDENT

Institution of Mechanical Engineers



Congratulations to Delft University of Technology

FOR PARTICIPATING IN FORMULA STUDENT 2008

The Delft University of Technology presents the next Formula Student Car it has built: the DUT08. The car is a mix of evolution and revolution. The evolution is based on the experience and knowledge obtained in the previous years and has resulted in a lighter, stiffer and safer chassis, together with an easy to adjust suspension. The revolution of the DUT08 is found in the developed electronics, power package and driveline.

The design philosophy used is: "user centred design", which focuses on the needs, wants and limitations of the end user, i.e. the weekend race driver. As a result the design is a constant compromise between Performance and Reliability, Availability, Maintainability and Serviceability (RAMS).



Class 1
Runner-up



Length/width/height/wheelbase
2455mm/1375mm/1118mm/1540mm

Track (front/rear)
1200mm/1200mm

Weight including 68kg driver (front/rear)
105kg/113kg

Suspension (front/rear)
Unequal length A-Arms. Push rod actuated/Push rod actuated
Cane Creek Double Barrel damper with coil over springs

Tyres (front/rear)
18x6.0-10 LC0 Hoosier Tires

Wheels (front/rear)
6.0 x 10, -30 mm offset from middle, 2 piece; aluminum center / rim with carbon rim shell

Brakes (front/rear)
Full-floating 3.5 mm/2.5mm thick steel disc, mounted via carrier to spindle, 196 mm outer diam. 140 mm inner diam.

Frame type
Vacuum infused two piece full monocoque glued together, carbon suspension hoop, front bulkhead and rear bulkhead, Carbon and Technora fibres, DSM Aeronite resin, Corecell T400 foam, Finnish birch multiplex inserts

Engine
2007 Yamaha WR450F

Bore/stroke/cylinders/cc
95.0 x 63.4mm/1 cylinder/449cc

Fuel
E-85 ethanol

Fuel system
Student designed/built dual injector sequential fuel injection system based on VEMS open source system. ECU hardware + software designed/built by students

Max power/max torque
9,000rpm/6,500rpm

Transmission/differential/final drive
Chain DID520/Salisbury, clutch type differential. Bias ratio under torque 4.17:1, without torque 1:1/2.61